AMENDMENT TO THE CLAIMS

1. (Currently Amended) ~~A method for preventing or inhibiting progression of Alzheimer's Disease~~ A method for delaying or inhibiting or suppressing the accumulation of an amyloid β peptide or fragment thereof in a brain of a mammal, comprising the step of ~~administering~~ contacting a composition comprising a recombinant DNA molecule, containing a gene encoding a recombinant antibody molecule end specific for the N-terminus or the C-terminus of an amyloid beta peptide, operably linked to a promoter which is expressed in the central nervous system, ~~in association with a means for gene delivery~~, ~~to a patient in need thereof to prevent the accumulation of amyloid beta peptides and the aggregation of peptides which form amyloid deposits in the brain~~ to a mammal, thereby delaying or inhibiting or suppressing the accumulation of an amyloid β peptide or fragment thereof in a brain of a mammal.

2. (Original) The method according to claim 1, wherein the composition is administered by injection intravenously, intra-arterially, intracranially, or intracephalically.

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3. (Original) The method according to claim 1, wherein the amyloid-β peptide is selected from the group consisting of amyloid β -peptides having the amino acid sequence of residues 5-44 of SEQ ID NO:1, residues 5-46 of SEQ ID NO:1, residues 5-47 of SEQ ID NO:1, and mixtures thereof.

4. (Original) The method according to claim 1, wherein the recombinant antibody molecule is end-specific for the N-terminus of the amyloid- β peptide.

5. (Original) The method according to claim 1, wherein the recombinant antibody molecule is end-specific for the C-terminus of the amyloid- β peptide.

6. (Original) The method according to claim 1, wherein the promoter operably-linked to the gene encoding a recombinant antibody molecule is a βAPP promoter.

7. (Original) The method according to claim 1, wherein the means for gene delivery in association with the recombinant DNA molecule comprises a viral vector.

8. (Original) The method according to claim 7, wherein the viral vector is adeno-associated vector (AAV).

9. (Original) The method according to claim 7, wherein the means for gene delivery further comprises cationic lipids or cationic liposomes.

10. (Original) The method according to claim 1, wherein the means for gene delivery in association with the recombinant DNA molecule comprises cationic lipids or cationic liposomes.

11. (Original) The method according to claim 1, wherein the means for gene delivery in association with the recombinant DNA molecule comprises a ligand capable of binding to a cell surface receptor.

12. (Original) The method according to claim 11, wherein the ligand is biotin.

13. (Original) The method according to claim 1, wherein the recombinant antibody molecule is a single chain variable region fragment.

14. (Original) A recombinant DNA molecule, comprising a gene encoding a recombinant antibody molecule end-specific for the N-terminus or the C-terminus of an amyloid-β peptide and a promoter operably linked to said gene, wherein said promoter is capable of expressing said recombinant antibody molecules in brain cells.

15. (Original) The recombinant DNA molecule according to claim 14, wherein said promoter is a βAPP promoter.

16. (Original) A vector comprising the recombinant DNA molecule of claim 14.

17. (Original) A host cell transformed with the vector of claim 16.

18. (Currently Amended) A pharmaceutical composition ~~for preventing or inhibiting progression of Alzheimer's Disease~~ for delaying or inhibiting or suppressing the accumulation of an amyloid β peptide or fragment thereof in a brain of a mammal,

comprising the recombinant DNA molecule of claim 14 in association with a means for gene delivery, and a pharmaceutically acceptable excipient.

19. (Original) The pharmaceutical composition according to claim 18, wherein the means for gene delivery is selected from the group consisting of viral vectors, cationic lipids, cationic liposomes, ligands capable of binding to a cell surface receptor, and combinations thereof.

20. (Original) The pharmaceutical composition according to claim 18, wherein said gene encodes a recombinant antibody molecule end-specific for the N-terminus of an amyloid- β peptide.

21. (Original) The pharmaceutical composition according to claim 18, wherein said gene encodes a recombinant antibody molecule end-specific for the C-terminus of an amyloid- β peptide.

22. (Original) A recombinant DNA molecule comprising a sequence encoding a single-chain antibody having end specific Aβ binding capability.

23. (Original) A recombinant DNA molecule in accordance with claim 22, further including a promoter operably linked to said sequence, wherein said promoter is capable of expressing said single-chain antibody in brain cells.

24. (Original) A vector comprising the recombinant DNA molecule of claim 23.

25. (Currently Amended) A pharmaceutical composition for ~~preventing or inhibiting progression of Alzheimer's Disease~~ delaying or inhibiting or suppressing the accumulation of an amyloid β peptide or fragment thereof in a brain of a mammal, comprising the recombinant DNA molecule of claim 22 in association with a means for gene delivery and a pharmaceutically acceptable excipient.

26. (Original) A pharmaceutical composition according to claim 25, wherein said DNA sequence encodes a single chain antibody end-specific for the N-terminus of an amyloid β peptide.

27. (Original) The pharmaceutical composition according to claim 25, wherein said DNA sequence encodes a single-chain antibody end-specific for the C-terminus of an amyloid β peptide.

28. (Original) A method for preventing the accumulation of amyloid–β peptides in the extracellular milieu of neurons comprising:

causing an antibody, which is end-specific for the N- or C-terminus of an amyloid-β peptide, to come into contact with the amyloid-β peptides in the extracellular milieu of neurons.

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29. (Original) A method in accordance with claim 28, wherein said antibody is end-specific for the N-terminus of an amyloid-β peptide.

30. (Original) A method in accordance with claim 28, wherein said antibody is end-specific for the C-terminus of an amyloid-β peptide.